SEQUENCE LISTING

<110> CHUN, Keun Ho
HWANG, Hyun Jin

<120> TARGET DETECTION SYSTEM HAVING A CONFORMATIONALLY SENSITIVE PROBE COMPRISING A NUCLEIC ACID BASED SIGNAL TRANSDUCER

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<400> 81

Ala Glu Ala Leu Glu Arg Met Phe
1 5

<210> 82
<211> 8
<212> PRT
<213> Schistoma

<220>
<221> MISC_FEATURE
<222> (1)..(8)
<223> Cathepsin cleavage site

<300>
<308> GenBank/NM_000558
<309> 2003-10-04
<313> (34)..(41)

<400> 82

Phe Leu Ser Phe Pro Thr Thr Lys
1 5

<210> 83
<211> 8
<212> PRT
<213> Schistoma

<220>
<221> MISC_FEATURE
<222> (1)..(8)
<223> Cathepsin cleavage site

<400> 83

Thr Pro Glu Glu Lys Ala Ser Val
1 5

<210> 84
<211> 8

<212> PRT
<213> Schistoma

<220>
<221> MISC_FEATURE
<222> (1)..(8)
<223> Cathepsin cleavage site

<400> 84

Val Thr Ala Leu Trp Glu Lys Val
1 5

<210> 85
<211> 8
<212> PRT
<213> Schistoma

<220>
<221> MISC_FEATURE
<222> (1)..(8)
<223> Cathepsin cleavage site

<400> 85

Leu Gly Arg Leu Leu Leu Val Val
1 5

<210> 86
<211> 11
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(11)
<223> cAMP-dependent protein Kinase phosphorylation site

<400> 86

Tyr Leu Arg Arg Ala Ser Leu Ala Gln Leu Thr
1 5 10

<210> 87
<211> 8
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(8)
<223> cAMP-dependent protein Kinase phosphorylation site

<400> 87

Phe Arg Arg Leu Ser Ile Ser Thr

1 5

<210> 88
<211> 11
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(11)
<223> cAMP-dependent protein Kinase phosphorylation site

<400> 88

Ala Gly Ala Arg Arg Lys Ala Ser Gly Pro Pro
1 5 10

<210> 89
<211> 8
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(8)
<223> cAMP-dependent protein Kinase phosphorylation site

<400> 89

Gly Arg Gly Leu Ser Leu Ser Arg
1 5

<210> 90
<211> 11
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(11)
<223> Casein Kinase I phosphorylation site; Ser (location:4)
phosphorylated

<400> 90

Arg Thr Leu Ser Val Ser Ser Leu Pro Gly Leu
1 5 10

<210> 91
<211> 10
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE

<222> (1)..(10)
<223> Casein Kinase I phosphorylation site; Ser (location:4 and 6) phosphorylated

<400> 91

Asp Ile Gly Ser Glu Ser Thr Glu Asp Gln
1 5 10

<210> 92
<211> 10
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(10)
<223> Casein Kinase II phosphorylation site

<400> 92

Ala Asp Ser Glu Ser Glu Asp Glu Glu Asp
1 5 10

<210> 93
<211> 11
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(11)
<223> Casein Kinase II phosphorylation site

<400> 93

Leu Glu Ser Glu Glu Glu Gly Val Pro Ser Thr
1 5 10

<210> 94
<211> 11
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(11)
<223> Casein Kinase II phosphorylation site

<400> 94

Glu Asp Asn Ser Glu Asp Glu Ile Ser Asn Leu
1 5 10

<210> 95
<211> 9

<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(9)
<223> Glycogen Synthase Kinase 3 phosphorylation site: Ser (location:9)
       phosphorylated

<400> 95

Ser Val Pro Pro Ser Pro Ser Leu Ser
1   5

<210> 96
<211> 9
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(9)
<223> Glycogen Synthase Kinase 3 phosphorylation site: Ser (location: 5
       and 9) phosphorylated

<400> 96

Ser Val Pro Pro Ser Pro Ser Leu Ser
1   5

<210> 97
<211> 7
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(7)
<223> Cdc2 protein Kinase phosphorylation site

<400> 97

Pro Ala Lys Thr Pro Val Lys
1   5

<210> 98
<211> 10
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(10)
<223> Cdc2 protein Kinase phosphorylation site

<400> 98

His Ser Thr Pro Pro Lys Lys Lys Arg Lys
1   5   10

<210> 99
<211> 11
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(11)
<223> Calmodulin-dependent protein Kinase II phosphorylation site

<400> 99

Asn Tyr Leu Arg Arg Arg Leu Ser Asp Ser Asn
1   5   10

<210> 100
<211> 10
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(10)
<223> Calmodulin-dependent protein Kinase II phosphorylation site

<400> 100

Lys Met Ala Arg Val Phe Ser Val Leu Arg
1   5   10

<210> 101
<211> 13
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(13)
<223> Insulin receptor phosphorylation site

<400> 101

Arg Arg Leu Ile Glu Asp Ala Glu Tyr Ala Ala Arg Gly
1   5   10

<210> 102
<211> 4
<212> PRT
<213> mammalian

<220>

<221> MISC_FEATURE
<222> (1)..(4)
<223> Mitogen-activated protein Kinase (Extracellular Signal-regulated
       Kinase) phosphorylation site

<400> 102

Pro Leu Ser Pro
1

<210> 103
<211> 4
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(4)
<223> Mitogen-activated protein Kinase (Extracellular Signal-regulated
       Kinase) phosphorylation site

<400> 103

Pro Ser Ser Pro
1

<210> 104
<211> 4
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(4)
<223> Mitogen-activated protein Kinase (Extracellular Signal-regulated
       Kinase) phosphorylation site

<400> 104

Val Leu Ser Pro
1

<210> 105
<211> 21
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(21)
<223> Mitogen-activated protein Kinase (Extracellular Signal-regulated
       Kinase) phosphorylation site

<400> 105

Lys Arg Glu Leu Val Glu Pro Leu Thr Pro Ser Gly Glu Ala Pro Asn
1   5   10   15

Gln Ala Leu Leu Arg
            20

<210> 106
<211> 11
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(11)
<223> cGMP-dependent protein kinase phosphorylation site

<400> 106

Gly Lys Lys Arg Lys Arg Ser Arg Lys Glu Ser
1   5   10

<210> 107
<211> 8
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(8)
<223> cGMP-dependent protein Kinase phosphorylation site

<400> 107

Phe Arg Arg Leu Ser Ile Ser Thr
1   5

<210> 108
<211> 7
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(7)
<223> cGMP-dependent protein Kinase phosphorylation site

<400> 108

Arg Lys Arg Ser Arg Ala Glu
1   5

<210> 109
<211> 12
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(12)
<223> Phosphorylase Kinase phosphorylation site

<400> 109

Asp Gln Glu Lys Arg Lys Gln Ile Ser Val Arg Gly
1   5   10

<210> 110
<211> 10
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(10)
<223> Phosphorylase Kinase phosphorylation site

<400> 110

Pro Leu Ser Arg Thr Leu Ser Val Ser Ser
1   5   10

<210> 111
<211> 9
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(9)
<223> Protein Kinase C phosphorylation site

<400> 111

His Glu Gly Thr His Ser Thr Lys Arg
1   5

<210> 112
<211> 10
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(10)
<223> Protein Kinase C phosphorylation site

<400> 112

Pro Leu Ser Arg Thr Leu Ser Val Ser Ser
1   5   10

<210> 113

<211> 11
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(11)
<223> Protein Kinase C phosphorylation site

<400> 113

Gln Lys Arg Pro Ser Gln Arg Ser Lys Tyr Leu
1 5 10

<210> 114
<211> 12
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(12)
<223> Protein Kinase C phosphorylation site

<400> 114

Pro Leu Ser Arg Thr Leu Ser Val Ala Ala Lys Lys
1 5 10

<210> 115
<211> 7
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(7)
<223> Protein Kinase C phosphorylation site

<400> 115

Leu Lys Phe Ser Lys Lys Phe
1 5

<210> 116
<211> 8
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(8)
<223> Protein Kinase C phosphorylation site

<400> 116

Arg Lys Arg Thr Leu Arg Arg Leu
1   5

<210> 117
<211> 21
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(21)
<223> p34 cdc2 protein Kinase phosphorylation site

<400> 117

Ala Lys Ala Gln His Ala Thr Pro Pro Lys Lys Lys Arg Lys Val Glu
1   5   10   15

Asp Pro Lys Asp Phe
            20

<210> 118
<211> 9
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(9)
<223> Meiosis-activated myelin basic protein Kinase phosphorylation
       site

<400> 118

Ala Pro Arg Thr Pro Gly Gly Arg Arg
1   5

<210> 119
<211> 11
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(11)
<223> Smooth Muscle Myosin Light Chain Kinase phosphorylation site

<400> 119

Lys Lys Arg Ala Arg Thr Ser Asn Val Phe Ala
1   5   10

<210> 120
<211> 11
<212> PRT

<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(11)
<223> Epidermal Growth Factor Receptor Kinase phosphorylation site

<400> 120

Arg Glu Asn Ala Glu Tyr Leu Arg Val Ala Pro
1 5 10

<210> 121
<211> 10
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(10)
<223> Epidermal Growth Factor Receptor Kinase phosphorylation site

<400> 121

Ala Glu Pro Asp Tyr Gly Ala Leu Tyr Glu
1 5 10

<210> 122
<211> 5
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(5)
<223> Protein Tyrosine Kinase pp60c-src phosphorylation site

<400> 122

Ile Tyr Gly Glu Phe
1 5

<210> 123
<211> 52
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<220>
<221> modified_base
<222> (39)..(39)
<223> The 39th nucleotide t is linked to biotin by a linker.

<400> 123

atggaagtat atggaagtat atggaagtat tcgtggggtt ttgcagtcgt ag 52

<210> 124
<211> 14
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<220>
<221> modified_base
<222> (1)..(1)
<223> The first nucleotide g is linked to fluorescein by a linker.

<400> 124
gactgcaaaa cccc 14

<210> 125
<211> 52
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<220>
<221> misc_feature
<222> (39)..(39)
<223> The 39th nucleotide n is an abasic nucleotide,
6-amino-2-hydroxymethyl hexanol linked to biotin.

<400> 125
atggaagtat atggaagtat atggaagtat tcgtggggnt ttgcagtcgt ag 52

<210> 126
<211> 16
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<220>
<221> modified_base
<222> (1)..(1)
<223> The first nucleotide g is linked to fluorescein by a linker.

<400> 126
gactgcaaaa ccccac 16

<210> 127
<211> 36
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<220>
<221> modified_base
<222> (1)..(36)
<223> The first nucleotide g is linked to fluorescein by a linker.

The 34th nucleotide t is linked to biotin by a linker. The last (36th) nucleotide c is linked to DABCYL (4-(4'-dimethylaminophenylazo)benzoic acid) by a linker.

<220>
<221> stem_loop
<222> (1)..(36)

<400> 127
gcagcctagg aaacaccaaa gatgatattt ggctgc 36

<210> 128
<211> 38
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<220>
<221> modified_base
<222> (1)..(38)
<223> The first nucleotide g is linked to fluorescein by a linker. The 6th and 36th nucleotides t are linked to biotin by a linker. The last (38th) nucleotide c is linked to DABCYL (4-(4'-dimethylaminophenylazo)benzoic acid) by a linker.

<220>
<221> stem_loop
<222> (1)..(38)

<400> 128
gcagctctag gaaacaccaa agatgatatt tgagctgc 38

<210> 129
<211> 30
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<400> 129
aaatatcatc tttggtgttt cctaggctgc 30

<210> 130
<211> 14
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<400> 130
gactgcaaaa cccc 14

<210> 131
<211> 12
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<220>
<221> modified_base
<222> (1)..(1)
<223> The first nucleotide c is linked to fluorescein by a linker.

<400> 131
ctacgactgc aa 12

<210> 132
<211> 52
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<400> 132
atggaagtat atggaagtat atggaagtat tcgtggggtt ttgcagtcgt ag 52

<210> 133
<211> 14
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<220>
<221> modified_base
<222> (4)..(4)
<223> The 4th nucleotide t is linked to biotin by a linker.

<400> 133
gactgcaaaa cccc 14

<210> 134
<211> 16
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<400> 134
gactgcaaaa ccccac 16

<210> 135
<211> 52
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<220>
<221> modified_base
<222> (1)..(1)
<223> The first nucleotide a is linked to biotin by a linker.

<400> 135
atggaagtat atggaagtat atggaagtat tcgtggggtt ttgcagtcgt ag 52

<210> 136
<211> 16
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<220>
<221> modified_base
<222> (4)..(4)
<223> The 4th nucleotide t is linked to biotin by a linker.

<400> 136
gactgcaaaa ccccac 16

<210> 137
<211> 52
<212> DNA
<213> Artificial

<220>
<223> Synthetic Sequence

<220>
<221> modified_base
<222> (1)..(1)
<223> The first nucleotide a is linked to biotin by a linker.

<220>
<221> misc_feature
<222> (39)..(39)
<223> The 39th nucleotide n is an abasic nucleotide,
6-amino-2-hydroxymethyl hexanol linked to digoxigenin.

<400> 137
atggaagtat atggaagtat atggaagtat tcgtggggnt ttgcagtcgt ag 52

<210> 138
<211> 14
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(14)
<223> The 12nd nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(14)

<400> 138
gcaggactac ctgc 14

<210> 139
<211> 16
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(16)
<223> The 14th nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(16)

<400> 139
gcaggacttt acctgc 16

<210> 140
<211> 18
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(18)
<223> The 16th nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(18)

<400> 140
gcaggactca ttacctgc 18

<210> 141
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 23rd nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 141
gcaggatact cattaccata cctgc 25

<210> 142
<211> 35
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(35)
<223> The 33rd nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(35)

<400> 142
gcaggatact cattagcgac gaacaccata cctgc 35

<210> 143
<211> 45
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(45)
<223> The 43rd nucleotide t is linked to biotin by a linker.

<220>

<221> stem_loop
<222> (1)..(45)

<400> 143
gcaggatact tagaccaaca cattagcgac gaacaccata cctgc 45

<210> 144
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 23rd nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 144
cgaccatcct cattaccata ggtcg 25

<210> 145
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 23rd nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 145
gcagcatcct cattacccta gctgc 25

<210> 146
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)

<223> The 23rd nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 146
cgacgatcct cattaccata cgtcg   25

<210> 147
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 23rd nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 147
ggaggataat cattaccata cctcc   25

<210> 148
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 23rd nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 148
ccaccatact cattacccta ggtgg   25

<210> 149
<211> 23
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(23)
<223> The 21st nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(23)

<400> 149
gcagatactc attaccatac tgc 23

<210> 150
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 23rd nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 150
gcaggatact gcttaccata cctgc 25

<210> 151
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 23rd nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 151
gcaggactct cattacactg cctgc 25

<210> 152
<211> 25
<212> DNA
<213> Artificial

<220>

<223> Synthetic sequence

<220>
<221> modified_base
<222> (25)..(25)
<223> The 25th nucleotide t is linked to biotin by a linker.

<400> 152
agcgcatcct cattacccta gcgct 25

<210> 153
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 21st nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 153
gcgcaatcct cattacccta tgcgc 25

<210> 154
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 19th nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 154
gcagcatcct cattacccta gctgc 25

<210> 155
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 13rd nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 155
gcagcatcct cattacccta gctgc 25

<210> 156
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 10th nucleotide t is linked to biotin by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 156
gcagcatcct cattacccta gctgc 25

<210> 157
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The first nucleotide g is linked to fluorescein by a linker. The last (25th) nucleotide c is linked to DABCYL (4-(4'-dimethylaminophenylazo)benzoic acid) by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 157
gcagctagga gtaatgggat gctgc 25

<210> 158
<211> 15

<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (11)..(11)
<223> The 11st nucleotide t is linked to biotin by a linker.

<400> 158
atcccattac tccta 15

<210> 159
<211> 13
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (11)..(11)
<223> The 11st nucleotide t is linked to biotin by a linker.

<400> 159
atcccattac tcc 13

<210> 160
<211> 15
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<400> 160
tagggtaatg aggat 15

<210> 161
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 23rd nucleotide t is linked to carboxyl group by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 161
gcagcatcct cattacccta gctgc 25

<210> 162
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 23rd nucleotide t is linked to amine group by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 162
gcagcatcct cattacccta gctgc 25

<210> 163
<211> 7
<212> PRT
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> MISC_FEATURE
<222> (1)..(7)
<223> Protein Kinase C phosphorylation site

<400> 163

Lys Arg Thr Leu Arg Arg Cys
1 5

<210> 164
<211> 6
<212> PRT
<213> mammalian

<220>
<221> MISC_FEATURE
<222> (1)..(6)
<223> Protein Kinase C phosphorylation site

<400> 164

Lys Arg Thr Leu Arg Arg
1 5

<210> 165
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 23rd nucleotide t is linked to phosphorylated heptapeptide, KRpTLRRC, by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 165
gcagcatcct cattacccta gctgc 25

<210> 166
<211> 7
<212> PRT
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> The 3rd amino acid T is phosphorylated.

<400> 166

Lys Arg Thr Leu Arg Arg Cys
1 5

<210> 167
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetic sequence

<220>
<221> modified_base
<222> (1)..(25)
<223> The 23rd nucleotide t is linked to the heptapeptide, KRpTLRRC, by a linker.

<220>
<221> stem_loop
<222> (1)..(25)

<400> 167
gcagcatcct cattacccta gctgc 25